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ABSTRACT

In 1995, the Education Commission of the States released the first in a series of annual reports examining the progress of education reform. The report concluded that despite many encouraging signs of progress, American schools and students were losing ground. This 1996 report, the second in the series, summarizes data on student performance, student backgrounds, and public attitudes about education; trends in state education policy; and major research findings on the effectiveness of reform. The information underscores the need for more comprehensive state efforts to evaluate reform policies. The report begins with an overview of a broad range of student performance indicators. The data show steady, though uneven, improvement in student performance. However, the progress is dwarfed by changes in the knowledge and skill requirements of work and citizenship in the 21st century. The second section reviews national trends in education policy, with an emphasis on standards-driven reform strategies and flexibility strategies. It reviews trends in school finance, technology, school safety and discipline, and school-improvement networks. In the absence of comprehensive evaluations, state policymakers lack empirical evidence about the effects of such reforms on student achievement. State education policy is therefore vulnerable to constantly changing trends, which contributes to public skepticism about reform. The third section reviews research findings on various reforms and concludes that the most effective strategies strengthen the teaching and learning process. These include reform networks and standards-based reform. Flexibility strategies (charter schools, deregulation, choice, site-based management, and waivers) generally work best when combined with other strategies that more directly affect teaching and learning. Recommendations for state policymakers are included. The appendix provides brief descriptions of the major reform networks and relevant information data. (Contains 55 notes.) (LMI)

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THE PROGRESS OF EDUCATION REFORM: 1996

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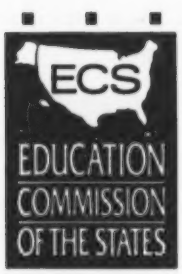

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EXECUTIVE SUMMARY

The Progress of Education Reform: 1996 is the second annual Education Commission of the States report on the status of education and education reform. Designed as a tool for policymakers, the report summarizes data on:

- Student performance, student backgrounds and public attitudes about education
- Trends in state education policy
- Major research findings on the effectiveness of reform.

The information presented in this report underscores the need for more comprehensive state efforts to evaluate reform policies. In the absence of such efforts, state leaders simply will not have the tools to focus accountability on student achievement or to stay the course with proven reform strategies. Public cynicism about and misunderstanding of education reform activities will deepen.

STUDENT PERFORMANCE, BACKGROUND AND PUBLIC ATTITUDES

The report begins with an overview of a broad range of student performance indicators. The news on this front is decidedly mixed.

On the one hand, the data show steady, if uneven, improvement in student performance. Notable progress has been made in closing the achievement gap between white students and minority students. Overall, more students are taking tougher courses, and fewer students are dropping out of school. These gains are all the more remarkable considering that schools are serving more and more children who face significant barriers to academic success.

On the other hand, the progress is dwarfed by changes in the knowledge and skill requirements of work and citizenship in 21st century America. The National Assessment of Educational Progress and other tests that evaluate student learning against objective standards of mastery paint a troubling picture of American students' readiness for the demands of living, working and learning in a changing world. And, although it has improved, the gap in performance between white and minority students remains unacceptably wide — as does the achievement gap between American children and students from other industrialized nations.

Some education reformers and policymakers see failure in these trends and use them to press for more radical changes in public education. Others use the same data to support a more optimistic view, particularly in light of the new challenges and demands schools are facing.

Public opinion, judging by a host of recent national polls and surveys, seems to fall somewhere in the middle of the two camps. Americans generally support public education, but believe schools in many ways are on the wrong track. Parents want safe and orderly schools. They want school staff and officials to communicate better about their children's progress specifically and about reform issues in general. They strongly support higher standards for all students.

TRENDS IN STATE EDUCATION POLICY

The report also takes a wide-ranging look at national trends in education policy, with an emphasis on ***standards-driven reform*** strategies and ***flexibility*** strategies. Standards-driven reform is the process of articulating challenging standards for all students and then organizing curriculum, instruction, assessment, and other policies and practices in ways that reinforce those standards. Flexibility embraces those policies designed to provide a school, or schools in general, with greater freedom to pursue distinctive education programs and gives families the option of choosing among those alternatives.

Also reviewed are trends in ***school finance*** (spending levels have increased, but funding policies are not tied directly to reform strategies); ***technology*** (capacity is growing, but more attention is needed on how to use technology to transform teaching and learning); ***school safety and discipline*** (states are struggling to balance the public's demand for order and safety against the public school ideal of serving all students); and ***school improvement networks*** (an important and growing element of reform, but with an untapped potential).

Data on the implementation of these reform strategies and their impact on student achievement are as mixed — and full of disclaimers — as the data about student achievement. In truth, states' efforts to evaluate their reform policies

comprehensively are limited and plainly inadequate, especially in light of the resources devoted to public education and of the demands from the public and policymakers for greater accountability.

In the absence of comprehensive evaluations, state policymakers lack hard evidence about whether reform policies really contribute to increased student achievement. Because state education policy is not driven by information about what works, it is susceptible to constantly changing trends. In turn, this exacerbates public skepticism and misunderstanding about the purpose, nature and impact of reform. Many reforms do work, according to emerging research, but some promising efforts suffer premature criticisms amid this dearth of evaluation and climate of skepticism.

EFFECTIVENESS OF REFORM

Research findings on various reforms are described in some detail in this report. The strategies that prove most effective at increasing student achievement are those that strengthen the teaching and learning process. Reform networks, including New American Schools, are providing leadership to help schools and districts develop a range of approaches to restructuring and reform.

Preliminary results from states leading the implementation of standards-based reform also are promising. They indicate that clear and rigorous standards — supported by assessments, instructional materials and teacher preparation — lead to improved student performance. Significantly, these results suggest that *all* students benefit from higher standards and that standards do not damage the academic chances of disadvantaged students.

Research into various flexibility strategies (charter schools, deregulation, choice, site-based management, waivers) generally suggests these efforts may be more effective when combined with other strategies that more directly affect teaching and learning, such as standards-driven reform and school improvement networks. As stand-alone policies, flexibility strategies are more limited.

The report ends with recommendations designed to build on the strengths and address the deficiencies of current and emerging trends in education reform. Recommendations include:

- **Invest in and strengthen evaluation efforts and encourage wider dissemination of results.** Quality evaluation efforts are central to the goals of continuous improvement, public support for reform, accountability for results and good public policy.

- **Continue to focus attention on improving teaching and learning.** Structural changes alone do not guarantee changes in instructional practice or enhanced student learning. Standards-based reform and reform networks can help focus policy on these areas and provide educators with the resources and knowledge they need to improve their practices.

- **Integrate reform strategies.** Decentralization, choice, charter schools and other reform initiatives could be strengthened greatly by being integrated with reform networks or high academic standards and related accountability systems. Similarly, reform networks likely will need support to take advantage of flexibility strategies as they encounter unsupportive education systems and rigid structures.

- **Continue to build public understanding of the issues.** Involving parents and the community should be a top priority. Policymakers and educators need to show how new ideas enhance, rather than replace, old ones. They must be clear about what it means to set high standards for all students and what it will take to meet them.

- **Give greater priority to strengthening school districts that serve high concentrations of low-income and at-risk students.** Until schools, working with their communities, can better serve the needs of low-income and at-risk students, performance levels in the public school system as a whole will not improve significantly.

INTRODUCTION

In 1995, the Education Commission of the States released the first in a series of annual reports examining the progress of education reform. That report, *Bridging the Gap: School Reform and Student Achievement*, provided clear, compelling evidence that U.S. students are doing better in school than they have in the past, but not well enough to keep pace with the changing skill and knowledge demands of work and citizenship in 21st century America. Despite many encouraging signs of progress, the report concluded, American schools and students are losing ground.

The Progress of Education Reform:1996 examines student achievement data, state-level reform activity, public attitudes toward education and ongoing research about what works. It reviews a wide range of initiatives states have undertaken to improve schools and student performance: academic standards, school improvement networks, decentralization, deregulation, school finance reform, technology, charter schools and other forms of choice.

A particular focus of this report is the quality and depth of state evaluation efforts. For reasons related to expense, capacity and interest, few states have made a priority of evaluating their reforms in a rigorous and comprehensive way. Most state evaluations focus on the effectiveness of specific programs, rather than on reform policies' impact on student achievement. In addition, some reforms simply have not been around long enough to establish a track record.

For reasons related to expense, capacity and interest, few states have made a priority of evaluating their reforms in a rigorous and comprehensive way.

The resulting lack of evidence about the progress of reform — especially in light of the significant growth in education spending — tends to undercut accountability and reinforce negative public opinion. Most people support public education, but they are not satisfied with its results or optimistic about its future. While the performance of schools and students has improved, the public still believes the education system is in drastic decline. Adding to the sense of crisis is the increasingly partisan tone of the public debate about education and reform, and the uncertainty created by rapid turnover in state political leadership.

For policymakers, the challenge is twofold: to address these fears and concerns and, at the same time, focus on creating a policy environment that promotes innovation and reform. This report makes the case that more coherent, comprehensive strategies to evaluate the effectiveness of reform are increasingly crucial to the success of states' efforts to improve the performance of students and schools.

THE PATH OF STUDENT PERFORMANCE

American schools are making slow but steady progress, despite the fact that they serve a student population facing increasingly significant nonacademic barriers to success. But this progress is dwarfed by changes in the knowledge and skill requirements of work and citizenship in 21st century America.

Despite reports to the contrary, the nation's schools are not failing. American students are doing better than they did a decade ago, with particular increases among minority students. The dropout rate has gone down, especially among blacks, even as students in general are meeting tougher graduation requirements. Moreover, this progress has occurred amid changing social and demographic conditions that present new challenges to families, communities and schools.

But this good news is tempered by two important considerations. First, the gains in student achievement are coming too slowly to keep pace with the changing requirements of work and citizenship in 21st century America. While the existence of a well-educated workforce does not by itself guarantee economic vitality, it is clear that the nation and its communities cannot sustain prosperity in the knowledge age without a highly skilled workforce

Second, the gains in student achievement come from low baselines when measured against objective criteria. Increasing test scores demonstrate that today's students know more than their predecessors did 10 years ago, but in general they still perform at low levels.

American students stack up poorly against youngsters from other industrialized nations in mathematics and reading achievement.[1] (The 1996 International Association for the Evaluation of Educational Achievement [IEA] Reading Literacy Study, described later in this report, is a notable exception to this trend.)[2] While American students eventually make up the ground by staying in school longer, the inefficiency of this strategy may make it difficult to sustain in the long run.

It is important to note the growing body of evidence that students can do considerably more than is currently expected of them. Countless examples from across the country testify to the ability of students to perform at higher levels, given high expectations and adequate support.[3] Put

HOW A GOVERNOR VIEWS STUDENT ACHIEVEMENT TRENDS

Georgia Governor Zell Miller, 1996-97 ECS chairman —

There is so much criticizing and defending of public education that the real challenge is lost. That challenge is to find cost-effective, practical ways to significantly improve education in the classroom. Regardless of what goes on around them, state leaders must keep their eyes on the ball.

another way, regardless of how far student performance has come, there is still ample room for improvement.

STUDENT PERFORMANCE DATA

Student performance indicators show steady, if uneven, improvement. Notable progress has been made in closing the achievement gap between white students and minority students. The policy implications of this performance data are the subject of vigorous debate. One camp declares failure. The other is satisfied with progress in the face of the social and demographic issues facing schools.

There are various approaches to measuring student performance, none of which, by itself, provides a full picture. Virtually every indicator of student achievement, and every measure used to monitor progress against that indicator, has limitations and critics. Moreover, the same set of data can support different, and sometimes conflicting, interpretations.

Reviews of a broad range of student performance data point to the following conclusions:

- **Students are taking tougher courses.** In 1992, 47% of graduating seniors had taken a core curriculum consisting of four years of English and three years each of science, math and social studies. This figure represents a notable increase over the 13% of 1982 high school graduates who completed the same core curriculum, according to the U.S. Department of Education's *Condition of Education 1995*. In this same period, the number of graduates who pursued courses in algebra, geometry, trigonometry, calculus, chemistry and physics increased significantly, for Hispanic students as well as white students.

- **More students are staying in school.** School completion rates have increased steadily since the 1970s, with the greatest increase occurring among black students. The decline in the dropout rate is particularly noteworthy because it occurred even as many states increased their course requirements for graduation.[4] Recent data show the gap in high school completion between black and white students has been eliminated. Completion rates for Hispanic students have declined somewhat, however.[5]

- **Student achievement in both science and mathematics has improved steadily, but the performance gap between whites and minorities persists.** Although they

HOW THE EXPERTS VIEW STUDENT ACHIEVEMENT TRENDS

David Berliner, professor of curriculum and instruction and psychology at Arizona State University, and Bruce Biddle, professor of social psychology and director of the Center for Research in Social Behavior at the University of Missouri —

> In 1983, the United States government published *A Nation at Risk*, asserting that American industry and our leadership in the world were endangered because of our poor public school system and the ignorant students it was producing. Hundreds of similar reports followed, all used by politicians and business leaders to keep the putative crisis in American education before the American people. Some of these critiques were well-meaning and scholarly. But many were not, and in aggregate they succeeded in undermining faith in our nation's schools. Evidence now suggests that the American public school system has actually performed remarkably well. And it has done so while it became harder to teach children than it was a generation ago. ("In Defense of Schools," *Vocational Education Journal*, March 1996.)

Chester Finn, John M. Olin Fellow at the Hudson Institute and former assistant secretary of education for research improvement in the Bush Administration —

> We could drown in worrisome data about student achievement, such as the latest NAEP results which show that just one-third of all U.S. high school seniors can read satisfactorily — a quarter of them can scarcely read at all . . . . ("Different Schools for a Better Future," *Hudson Briefing Paper*, August 1996.)
>
> [Policymakers must contend with] educators who still deny that anything is awry and insist that U.S. schools are getting a bum rap stemming from a right-wing conspiracy to invent a faux crisis . . . . A minor cottage industry has sprung up to supply these deniers-of-the-left with spurious evidence, and several experts now make a nice living telling relieved conference-goers that whatever may be less than perfect about America's schools is the fault of William J. Bennett, Newt Gingrich and irresponsible parents. ("On Governors and Ostriches: Education Summit-Goers Must Deal With Deniers on the Political Left and Right," *Education Week*, February 14, 1996.)

do not occur every year, increases in mathematics and science achievement can be seen for students of every race/ethnic origin and at all three grade levels tested by the National Assessment of Educational Progress (NAEP). Notable increases occurred in the percentage of students who attained at least a basic science and mathematics knowledge; these increases were best for blacks and Hispanics and students at the lowest achievement levels.[6]

While racial/ethnic achievement gaps have diminished, they remain enormous. In the 1992 NAEP science assessment, 90% of white students performed at a level that indicated they could apply general scientific information, compared to only 56% of black students, for example. These trends also hold true at the most advanced levels of mastery, the most crucial for college entry and success and for associated post-collegiate professional opportunities.[7]

NAEP: TRACKING STUDENT ACHIEVEMENT

The National Assessment of Educational Progress (NAEP) studies trends in student achievement. The U.S. Department of Education uses NAEP to measure the performance of students at ages 9, 13 and 17 in mathematics, science and reading and to provide results that can be tracked over a period of years. (NAEP has been expanded to cover history, geography and other subjects, but these new tests do not yet yield information about changes in achievement over time.)

For each grade, three achievement levels are set — basic, proficient and advanced — based on judgments made by broadly representative panels about what students should know and be able to do in the particular content area being tested. Basic achievement denotes partial mastery of knowledge and skills that are prerequisite for proficient work. Proficient achievement represents solid academic performance that demonstrates mastery of challenging subject matter. Advanced achievement signifies superior performance.

While NAEP has the best data available for identifying national performance trends, the data have limitations. NAEP examinations are administered only to a small, though representative, sample of students. Moreover, because curriculum decisions are made at the local level, items included on the NAEP assessment may or may not reflect material that students have been taught. Finally, because no rewards or penalties are attached to the scores, students may not take a NAEP test as seriously as they do exams that affect their grades or futures.

- **Student achievement in reading and writing improved dramatically during the 1980s and early 1990s, but progress has slowed.** The 1994 NAEP reading assessments suggest that the steady year-to-year improvement in student achievement experienced since the 1980s has slowed. The 1994 assessment found the average reading proficiency of 12th-grade students declined significantly from 1992 to 1994, especially among lower-performing students. In 1994, 30% of 4th graders, 30% of 8th graders and 36% of 12th graders attained the "proficient" level in reading. Across the three grades, 3-7% reached the "advanced" level.[8] (see box at left)

  By contrast, the IEA Reading Literacy Study, conducted in 1991 and released in 1996, painted an encouraging picture of American students' literacy. In the 31-country test, American 4th graders outperformed students from all other nations except Finland and Sweden. The performance of American 9th graders was grouped closely with students from 15 nations and was superior to students from 14 other countries. Most groups of American students outperformed the world average of the participating countries. Even the most disadvantaged American students did not differ dramatically from the average.[9]

  The apparent inconsistency between the NAEP and IEA conclusions may result from the different points of comparison used to report the findings. IEA reporting is based on comparisons of student performance across countries, while NAEP reporting is based on

comparisons of performance against standards that have been defined independently of test results. There are also marked differences between the IEA and NAEP tests in the definitions of reading literacy and in what students must do to demonstrate their comprehension of material. The NAEP test uses a more demanding definition of literacy.[10]

- **Student performance in history and geography is mediocre.** On the newly developed NAEP history test, 57% of 12th graders did not reach even the "basic" level of achievement, and just 11% reached the "proficient" level. In the 4th and 8th grades, more than 60% of students reached at least "basic," and 17% of 4th graders and 14% of 8th graders attained "proficient."[11]

  In geography, 22% of 4th graders, 28% of 8th graders and 27% of 12th graders reached the "proficient" level. At each grade, roughly 70% of students were at or above the "basic" level.[12]

- **Black and Hispanic students have significantly improved in math, science and reading.** Black and Hispanic students' scores on the NAEP math, science and reading exams have improved steadily since the 1970s, and the achievement gap between these students and white students has lessened over time. Significant gaps in performance persist, however, and gains made during the last decade appear to be flattening out. According to NAEP reading data, black students may be entering high school at a reading level as much as two years below the average of white students. NAEP data also show that Hispanic 13-year-olds' math skills may be as much as two years behind those of white 13-year-olds.[13]

- **A strong relationship exists between levels of parent education and student performance.** As a general rule, the higher the parents' education level, the better students performed on the assessment. Analysis of the recent IEA Reading Literacy Study shows that the educational attainment of both mothers and fathers influences reading comprehension more than any other aspect of family background. Although coming from a poor family is strongly associated with poor reading achievement, the apparent reading achievement gap between rich and poor is reduced by two-thirds when parents' education, minority status and the like are factored out.[14]

While only 3-7% of American students reached the "advanced" level of reading on the NAEP test, American 4th graders outperformed students from all other nations except Finland and Sweden on the IEA Reading Literacy Study.

BEYOND THE CLASSROOM: THE INFLUENCE OF PEERS AND PARENTS

A growing body of evidence points to the profound influence of peer attitudes and parent involvement on student achievement. This evidence is underscored in *Beyond the Classroom*, a recent study conducted by Laurence Steinberg. Among the key findings:[18]

- An extremely high proportion of American high school students do not take school or their studies seriously. More than one-third of the students surveyed said they get through the day in school primarily by goofing off with their friends.
- The adolescent peer culture in contemporary America demeans academic success and scorns those who try to do well in school. Fewer than one in five students say their friends think it is important to get good grades in school. Nearly 20% of all students say they do not try as hard as they can in school because they are worried about what their friends might think.
- American students' time out of school is seldom spent in activities that reinforce what they are learning in their classes. More typically, their time and energy are focused on activities that compete with, rather than complement, their studies.
- The average American high school student spends about four hours a week on homework outside of school. (In other industrialized countries, the average is about four hours per day.) Half of the students in the survey reported not doing their assigned homework.
- Two-thirds of high school students are employed, and roughly half hold down a part-time job that takes up more than 15 hours a week. More than one-third of students who work say they take easier classes so their jobs will not hurt their grades.
- American parents are just as disengaged from schooling as their children are. More than half of all students say they could bring home grades of "C" or worse without their parents getting upset. One-fourth say the same thing about "D" grades or worse. Nearly one-third of students say their parents have no idea how they are doing in school. Only about one-fifth of parents consistently attend school programs — and more than 40% never do.

In 1996, Scholastic Achievement Test (SAT) and American College Testing (ACT) scores continued to improve. Those results are not included in this report because (1) those tests are designed primarily to predict college success, not to measure student academic performance; (2) students taking the SAT and ACT are not a representative sample of U.S. students (the proportion of high school seniors taking the exams varies widely from state to state); and (3) year-to-year changes in SAT and ACT scores, while widely reported, mean little because they reflect small fluctuations that result from student responses on a limited number of test questions.[15]

THE DEMOGRAPHIC CONTEXT

Schools are educating more and more children who face significant barriers to academic success. Student achievement also is hindered by an adolescent peer culture that does not value academic success and by lack of parent involvement.

Any discussion of the status of student performance is incomplete without a look at the social and demographic contexts in which schools operate. Many of today's students bring enormous needs to the schoolhouse door and have fewer and more fragile sources of family and community support on which to rely. Schools are struggling to respond to these changes, even as their mandate — to educate all children to high levels of achievement — is expanding.

- **The profile of the student population is undergoing profound change**. The proportion of white students in both public and private schools continues to decline, and the student population is becoming increasingly diverse in terms of culture and language.[16] More students have needs that require special programs and services. The number of children served under the Individuals with Disabilities Act and Chapter 1, for example, increased by 3.9% between 1990-91 and 1991-92 alone.

  Families and communities that support the education and development of children are changing as well. More children are growing up in single-parent families or in households where both parents work full time. Real wages, particularly for workers with limited education, are declining, as are government benefits for low-income families, according to *Kids Count*, the Annie E. Casey Foundation's annual report on child welfare.[17]

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- **The most telling indicator of these changes is the child poverty rate**. Poverty is related to a host of negative developmental, educational and adult outcomes. Poor children are more likely to be sick and underweight as toddlers, to enter kindergarten unprepared for school and to fall behind in the early grades. They face a much higher prospect of dropping out of high school, becoming teen parents and being either a victim or a perpetrator of crime, the foundation reported.

- **Today, one-quarter of American children under the age of 6 live in poverty.** Interestingly, more than one-third of these poor children are growing up in households where at least one parent works full time. Since 1989, a period of overall strength in the national economy, the number of children in working-poor families jumped 30%, *Kids Count* noted.

  The report also pointed out that 40% of parents in working-poor families are high school dropouts. Another 35% have no education or specialized training beyond high school.

  A study of preschoolers released by the National Center for Education Statistics in 1995 identified five socioeconomic risk factors associated with learning difficulties. Those include: the mother has less than a high school education, the family is below the poverty line, the mother is non-English speaking, the mother was unmarried at the time of the child's birth, and only one parent is present in the home. Half of today's preschoolers are affected by at least one of these risk factors, and 15% are affected by three or more. Low maternal education and minority-language status are most consistently associated with learning difficulties among preschoolers, according to *Approaching Kindergarten: A Look at Preschoolers in the United States*.

- **Welfare reform will influence these demographic trends in ways that cannot yet be predicted.** The Urban Institute estimates that federal welfare reform legislation will throw an additional 1.1 million children into poverty. While welfare reform may contribute to the stability and security of families over the long term, in the short term, schools will be on the front line of institutions dealing with a great many needier children.

  These statistics underscore the conclusion of *Kids Count:*

  > Within states, a new priority has to be given to strengthening those districts that serve the highest concentrations of low-income and at-risk students. Within districts, priority must be given to improving those schools that have been least effective in achieving key learning benchmarks for all their students. And within individual schools, a greater priority has to be placed on engagement and achievement by those students most likely to fall behind and fail.

THE PUBLIC'S VIEW OF EDUCATION AND EDUCATION REFORM

Americans support public education, but are dissatisfied with the current status of student achievement and the progress of education reform. The public wants schools that are safe, communicate well with parents and hold high standards for all students. A review of major national opinion polls and surveys conducted in 1995-96 yields these trends and areas of agreement in public opinion:

- **Improving education is important to Americans.** About 64% of Americans surveyed in the 1996 *Phi Delta Kappan/Gallup Poll of the Public's Attitudes Toward the Public Schools* believe it is more important for the federal government to improve public education than to balance the federal budget.[19] Only 25% felt otherwise.
- **Public confidence in the schools continues to diminish.** Parents believe public schools are on the wrong track — even in their own community.[20] People want change, but disagree sharply over how much and what kind. A slim majority of parents in an ECS study say schools need only minor fine-tuning, while 41% call for a complete overhaul. Parents also are deeply divided over what direction the changes should take. (See ECS' *Listen, Discuss and Act* for more information on the survey of parents in seven cities and states.)
- **The public has an overly negative perception of education.** On issues of international competitiveness, dropout rates and the numbers of students in special education, the public is unaware of recent progress or exaggerates problems, according to the 1995 *Phi Delta Kappan/Gallup Poll.*
- **Issues of school safety, order and discipline continue to be a priority concern of parents, teachers and the public at large.** Significant majorities in several polls agreed that students who cannot behave should be permanently removed from schools.[21]
- **People oppose using tax money to support nonpublic schools, and they are against privatizing the basic instructional functions of schools.** By a margin of 61% to 36%, the public rejects allowing students to attend private schools at public expense, according to a *1996 Gallup Poll.*
- **Parents and teachers alike agree that parent involvement is a crucial part of children's education and a key aspect of any education reform effort.** Barely half the students surveyed in an annual survey are satisfied with the support schools receive from parents and the community.[22]
- **The public strongly supports standards.** A strong consensus in favor of higher standards for all students exists, crossing racial, ethnic, age, income and geographic lines. Several sources show 85% in favor of making the attainment of standards a condition of graduation or promotion.[23]

Support for standards is considerably weaker among educators. Only 51% of teachers said academic standards are too low. Some 80% of teachers, however, said the No. 1 problem schools face is money. More disturbing, only 21% of teachers believe an excellent academic education is the key to success. Teachers ranked academics third behind persistence and social skills. Finally, 80% of teachers expressed the view that poor parenting is the major cause of low student performance.[24]

THE RANGE OF STATE RESPONSES

Every state charts a unique reform course, depending upon its history, political dynamics and resource and policy infrastructure. This section tracks categories of education reform that are being pursued by enough states to represent national trends. In general, states are pursuing two major policy strands to strengthen public education — standards-driven reform and flexibility — as well as a variety of stand-alone initiatives in such areas as school finance, technology, and school safety and discipline.

STANDARDS/ASSESSMENT/ ACCOUNTABILITY

Nearly all states are involved in standards-based reform, and their commitment to this strategy remains strong. State efforts are diverse and of uneven quality, but the promise of standards — higher expectations, enhanced equity and shared accountability for results — holds great potential.

The national move toward standards-based education reform follows decades of public concern over low expectations for American schools and the students they serve. Standards complement the results-oriented, systems-based approach to change that has dominated reform policy in the last several years.

There is a wide range of activity under the rubric of standards-driven reform, and the quality of these reforms is uneven. A 1996 ECS publication, *Standards and Education: A Roadmap for State Policymakers*, sets out the key principles that define a standards-led system:

- Challenging standards apply to all students.
- Standards are clear, tangible and widely communicated. Standards provide students with a clear picture of what success looks like and give teachers specific guidance in selecting instructional practices to meet students' different learning styles and needs.
- Success is based on providing adequate time and student effort. When students have adequate time and work hard, they can meet the standards.

A RENEWED COMMITMENT TO STANDARDS: THE 1996 NATIONAL EDUCATION SUMMIT

In a follow-up to the historic 1989 gathering in Charlottesville, Virginia, the nation's governors joined business leaders, education experts and President Clinton to convene a National Education Summit in March 1996. The summit focused on the future of education standards and the role of technology in American education.

The 1989 education summit produced the National Education Goals, which since have fallen under criticism for being overly vague and unresponsive to local concerns. Participants in the 1996 summit reached consensus around several conclusions related to standards:

- States should develop their own standards; there should be no strong national standards.
- States should cooperate in developing tests that can hold students to the standards.
- States should establish a national entity, independent from the federal government, to serve as a clearinghouse for state-led efforts to develop standards and assessments. This entity will assist in local implementation of standards and assessments.

The 1996 education summit demonstrated the continuing commitment of elected leaders to establishing and implementing high academic standards for America's students. The meeting also underscored state leaders' growing reluctance to cede any role in this process to the federal government. States will continue to play the dominant role in standards-led reform.

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- Curriculum, assessments and instruction are aligned with, and designed to reinforce, content standards.
- Different types of assessment tools are used to measure different kinds of knowledge and skills. Multiple levels of performance make it possible to tell students where they stand with respect to achieving a standard. Additional instruction can help students move to higher levels of achievement.

Forty-four states now mandate some form of standards. Most of the approaches fall into one of three categories: The *statewide leadership approach,* in which the state guides the development of consensus standards used by all districts; the *local leadership approach,* in which the state requires each district to develop its own set of standards; and the *state-local approach,* in which the state develops model standards and requires each district to develop its own set of standards that meets or exceeds state standards.

According to a 1996 American Federation of Teachers study of efforts to raise standards, 48 states are developing common academic standards. These standards increasingly focus on core academic areas, but often are too vague to be effective.[25]

Twenty-five states have developed curriculum frameworks, although 12 states use such frameworks voluntarily at the local level. Nearly all states (46) also mandate assessments of student performance. Many encourage local districts to conduct their own assessments, which exceed the state requirements and often are tied to local district improvement plans.[26]

A majority of states require frequent regular school, district and statewide accountability reports, typically including demographic profiles of students, profiles of education, measures of student achievement and financial information.

FLEXIBILITY

Most states are exploring a broad range of policy options to deregulate schools. These flexibility strategies often are not highly effective as stand-alone reform policies, but can complement standards-based reform and other restructuring efforts.

Flexibility is not a new idea. For the past several decades, some educators have claimed that government efforts to make schools better and fairer places have harmed learning. Teachers and parents complained that public schools were too rule-bound and inflexible and that opportunities for personal initiative were lost. State and federal leaders often took these claims seriously, but regulation continued to grow.

The current appeal of more flexibility is based on a growing consensus among educators, analysts and the public that more regulation will only make things worse — that schools must function more like communities and less like government agencies. It also rests on a belief that the individual school — as opposed to a state agency — has the best information and expertise with which to make education decisions about the children it serves. The one-size-fits-all approach to education is increasingly suspect, as more is discovered about the different ways children learn.

These points of consensus are supported by several recent shifts in public opinion, including:

- Growing demand for more efficiency and productivity in public services
- Greater willingness to consider markets and competition as partial alternatives to bureaucracy
- Rising concern that standards alone may not bring about major improvement in student performance and school quality.

The range of strategies that fall under the heading of flexibility can be divided into two broad categories: those that are designed to apply to all schools, and those that present individual schools, districts and communities with options. These strategies are described in greater detail in the 1996 ECS report *Bending without Breaking — Improving Education through Flexibility & Choice.* A summary follows.

Policy Strategies That Change the Policy Environment for All Schools

- **State Education Code Revisions**

Several states recently have completed a major overhaul of the rules and regulations that limit the ability of schools to tailor instruction to the needs of their students.

In South Dakota, the legislature abolished nearly 100 state statutes and 500 administrative rules governing K-12 education. South Carolina exempted schools from the Defined Minimum Program, Basic Skills Assessment Program and Remedial/Compensatory Program requirements if they meet student performance criteria. The Texas legislature reduced its education code by half and gave more authority to local school boards. Overall,

most state code revisions have been piecemeal and temporary.

- **Public School Choice**

  Many states allow families to choose the public schools their children attend. The intent of most choice plans is to create pressures for school improvement and options for students in failing schools. Advocates believe schools will be forced by the potential loss of students, and the subsequent loss of funding, to improve their instructional programs. Thirty-four states have enacted legislation that permits open enrollment across district lines — typically on a space-available basis. When district open enrollment is included, 42 states encourage parental choice.

Policy Strategies That Provide a New Operating Environment for Individual Schools and Communities

- **Waivers**

  Waivers permit applicable rules to be suspended in specific circumstances to allow local innovation, adjustment to unique needs or rewards for extraordinary performance. Forty states allow petitions for waivers. To date, however, most schools and school districts have used waivers sparingly and only with respect to minor issues. A handful of states and charter schools within states that grant few other waivers have made more extensive use of waivers.

- **Decentralized Decisionmaking**

  Site-based management (SBM) is designed to give people closest to students — their parents and teachers — the tools and opportunity to make appropriate decisions about their education. While SBM's logic is appealing, how it is implemented and the results it yields are not so straightforward. The definition of SBM varies widely; in fact, many models do not actually involve local management of schools. Nor do most of them address external constraints to decisionmaking or extend authority over budgetary and staffing decisions.

- **Charter Schools**

  Charter schools are meant to be highly autonomous institutions with the potential to control budget, staffing and curriculum decisions. They may be granted waivers from specific rules or blanket waivers, depending on state policy. In theory, the flexibility that charter schools

Polls and opinion research consistently show that public support for additional increases in education funding hinges on its confidence that schools use current resources effectively.

receive is accompanied by higher expectations. The success of a charter school hinges on its ability to attract and retain students, since schools that fail to perform can be closed. Six states and the District of Columbia enacted charter school legislation in 1996, bringing to 26 the number of states and jurisdictions that permit charter schools.

These models vary widely in structure, strength and in their potential impact. According to a recent ECS analysis, most of the newer laws are stronger than those passed in previous years. This trend suggests supporters of charter-school legislation are making fewer compromises than in the past and that policymakers better understand how differences in charter school legislation affect the potential scope of this reform strategy. (For more information, see the *ECS Clearinghouse Notes: Charter Schools Laws as of August 1996.)*

- **The Mix of Standards and Flexibility**

On the surface, efforts to improve public education by expanding available options may seem inconsistent with standards-led reform, which seeks to improve public education by making it more coherent. In fact, the increased accountability that comes with standards-based systems can help ensure that more flexible, market-driven education systems still deliver what the public wants and needs — highly educated students. As noted in *Bending without Breaking*, the synthesis of these two reform strategies creates an opportunity for multiple, diverse models of schools in a supportive and accountable environment.

SCHOOL FINANCE

States have increased education spending significantly and pursued efforts to correct spending disparities. Finance policies still provide very limited incentives for innovation and improvement, however.

Between 1960 and 1990, the average per-pupil expenditure for K-12 education in the United States, adjusted for inflation, increased by more than 200% percent.[27] Much of the funding growth in the past several years has been channeled toward special purposes, such as providing nonacademic services and educating children with disabilities, rather than toward regular academic instruction.[28] Spending on education for children with disabilities increased from 3.7% of school budgets in 1967 to 17% in 1991, while spending for education-related services, such as counseling, desegregation, health and psychological services, nearly doubled during the same time period.[29]

For the past 30 years, numerous states have struggled to reduce per-pupil spending disparities among school districts. More recently, states have modified finance formulas to provide more funding stability and to reduce unfunded mandates on local school districts.

Policies that more closely tie school finance to student performance have emerged only recently. While not necessarily tying them to their finance formulas, 29 states authorize the use of sanctions against schools that fail to meet minimum standards. Those sanctions include: removal of the superintendent, state takeover of the school or district or, in rare cases, the closing or consolidation of the district.

Other states provide financial incentives to schools. Georgia, for example, gives achievement grants to schools or districts that receive a superior comprehensive evaluation rating. The grants may be spent in any way the recipients decide. Indiana provides pay increases for educators when their schools excel.

In the opinion of the Consortium for Policy Research on Education, however, even the latest and most ambitious school finance plans provide only modest incentives to spur higher achievement.[30] These old-fashioned formulas seem ill-suited to the current emphasis on equity, outcomes and standards, and the recent focus on school-level reform. Truly innovative school finance strategies, such as school-based budgeting and restructuring teacher compensation to reward those who develop new skills, show greater promise to support these new reform directions.

Polls and opinion research consistently show that public support for additional increases in education funding hinges on its confidence that schools use current resources effectively. It is increasingly difficult to engage in a policy debate about education financing without also addressing issues of education performance and reform.

TECHNOLOGY

Technology offers the potential to reshape — even redefine — the education process. To date, however, the primary focus of state technology policies has been on developing and financing technology infrastructure and not on applying technology to the teaching and learning process.

Technology initiatives and policies are driven by a dual motive. The first is the recognition that technology as an ***end*** of instruction is increasingly essential in preparing all students for work and citizenship in the 21st century. The second is the potential of technology as a ***means*** of instruction and communication. Technology enables schools to add depth and choice to curriculum, provide individualized instruction, link students to exciting sources and forms of information, and network with other schools and communities of interest. It also provides new ways to deliver professional development activities and new opportunities for professional networks.

In 1995-96, state legislation involving technology included tax credits to taxpayers who donate technology to schools, special provisions to enable schools to improve their technological infrastructure, the creation of networks to connect schools with one another and with libraries and colleges and universities, and the expansion of schools' access to emerging telecommunications networks, according to ECS' *1995-96 State Issues Report*. In general, the focus of state action is on developing and financing the infrastructure to bring technology into schools, rather than on how technology can or will be used to strengthen teaching and learning.

Overall, the number of computers available to students is increasing. In 1990, the student-to-computer ratio was 22-to-1. By 1995, it had improved to 12-to-1. This figure, however, gives a misleading sense of progress. A recent ECS review of the current status of technology in American education found that these computers are often outdated and placed in isolated labs with little connection to classrooms or outside networks. In general, students use the computers for drill and practice, and teachers lack adequate training to incorporate technology more fully into their instruction.

According to the Council of Education Facility Planners International, only 3% of classrooms are connected to any kind of network, and only 12% of classrooms have access to a telephone. Half of school districts report having a local-area network, but most connect only administrative offices and media centers.

INNER-CITY SCHOOLS: SPECIAL PROBLEMS, SPECIAL NEEDS

The major conclusions of this report regarding achievement and change are largely untrue for schools in the urban core. These schools tend to serve a high concentration of students who face significant nonacademic barriers to success. For this reason, urban schools operate under dramatically different conditions that may require a different, more radical set of solutions. It is important to note that while students of color are making significant progress overall in closing the achievement gap, these positive trends may hide low-performing areas with high concentrations of students of color in urban schools. For more information on urban education, see the ECS publications, *The New American Urban School District* and *A Framework for Urban Hope*.

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SCHOOL SAFETY AND DISCIPLINE

The process of creating safe, secure learning environments for students requires a careful balancing of rights and interests in light of public schools' obligation to provide all children with an opportunity to learn.

In recent years, the creation of safe, orderly, drug-free schools has topped the public's list of priorities for education reform. A balancing of rights is at the core of this issue. Tension exists between the commitment to educate all children and a growing conviction that the behavior of a few disruptive students should not be allowed to diminish the opportunities and attention available to students who want to learn.

The 1994 federal Gun-Free Schools Act has had a tremendous impact on state-level policies to promote safe schools. To receive federal funds under the Elementary and Secondary Education Act, states must have a law stating that students who bring lethal weapons to school will be expelled for at least one year. Most states have passed legislation to comply with this federal mandate. In addition, at least six states have passed legislation to hold parents and guardians more responsible for their children's behavior.

In 1995-96, more legislation was introduced on [weapons at school] than any other [education topic].

In 1995-96, more legislation was introduced on this education topic than any other. Strategies range from stricter expulsion procedures to dress codes (including student uniforms). Many states considered and/or enacted legislation requiring greater disclosure and sharing of information among courts, police and schools about students who are disciplined.[31]

■ ■ ■

The next chapter reviews recent education research examining effectiveness of the reform strategies mentioned above. Only by tracking this kind of research data — and by contributing to it through comprehensive evaluations of state policy — will policymakers have the data they need to weigh alternatives, make mid-course policy adjustments and share results with the public in a way that serves both the public and the schools.

LESSONS FROM RESEARCH

The most promising reform strategies continue to be those focused directly on improving the quality of the teaching and learning process. But the lack of comprehensive evaluation strategies to yield credible evidence about the results of reform exacerbates public cynicism and misunderstanding, makes states susceptible to constantly changing trends, and undermines efforts to hold schools, teachers and schools accountable.

Last year's education reform update, *Bridging the Gap: School Reform and Student Achievement*, reviewed available research about reform policies that seem to make the most difference in student performance. In truth, the evidence of school success is decidedly mixed. Smaller schools generally perform better than larger schools, but reducing class size may make no difference. Site-based management — rarely evaluated and often pursued as an end in itself — appears to have little effect on student performance. And while parents who choose their children's schools appear more satisfied than others, the choice program studied in at least one major city showed ambiguous results. A recent study found significant results only for students who participated at least three years.

Research suggests that while each of these measures may produce transitional improvements, such as increasing parent involvement or making the school environment more conducive to learning, real gains in student achievement result from the restructuring of the teaching and learning process itself.

The 1995 ECS report concluded that the most promising reforms are those aimed at what goes on in the classroom: strengthening the interaction between students and teachers and enhancing the curriculum. In *The Progress of Education Reform: 1996*, that conclusion is underscored by some major new studies on school restructuring and by evidence just emerging from states and districts that have been engaged in standards-led reform for some time. Early signs of progress by the school reform networks also support this emphasis. These studies and their findings are discussed on the next pages.

THE POLICY PUZZLE

Many of the findings described in this section and throughout this report are confirmed in the five-year research summary recently released by the Consortium for Policy Research in Education. Among the key findings of *Public Policy and School Reform: A Research Summary:*

- Most states and many districts have embraced standards-based reform in an effort to forge more coherent policy.
- Education policy has not yet provided coherent, effective guidance about how to improve instruction.
- Reforms are not always realistic or based on understanding of what will actually work in different contexts. Knowledge of how to transform successful demonstration projects into large-scale reforms is more limited than many people like to admit. This is one reason why the rhetoric of reform often exceeds the accomplishments.
- Reforms often put too much emphasis on structural changes — such as longer class periods or common teacher planning time — and pay inadequate attention to high-quality instruction.
- Policymakers do not pay enough attention to the role that students should play in raising their achievement, such as effort and readiness to learn.
- Current school-funding systems create too many inequities among schools, deny critical resources to schools that serve disadvantaged students and are not well-suited to dynamic, school-based reform.

RESTRUCTURING

Significant evidence exists to show that standards-based restructuring efforts yield increases in student achievement for students of all races and socioeconomic backgrounds.

The definitions of restructuring vary for different researchers and policymakers. Restructuring generally refers to school-level measures aimed at:

- Implementing standards that describe what students should know and be able to do
- Matching curriculum to these new standards
- Adjusting instruction, scheduling and learning tools to help individual students meet the standards
- Changing the tests used to assess achievement of the standards
- Changing the working environment so that teachers can learn continuously
- Rewarding initiative and innovation
- Focusing the school culture on students.

This definition of restructuring encompasses the reform strategies of standards-based reform, flexibility and reform networks. The research reviewed in this section includes general studies of restructuring as well as research addressing more specific restructuring strategies.

A series of studies, culminating in a five-year study undertaken by the Center on Organization and Restructuring of Schools (see box at left) at the University of Wisconsin, produced strong empirical evidence that when "authentic pedagogy" is in place in restructuring schools, student achievement is greater. Authentic pedagogy is defined as *classroom instruction* that uses higher-order thinking, substantive conversation, deep knowledge and connections to the world beyond the classroom, and *assessments* that require students to organize information, consider alternatives, elaborate written communication and connect problems to the world. Significantly, the positive effects apply to all students regardless of race, ethnicity or socioeconomic backgrounds. Results are consistent across different grades and subjects in schools across the nation.

THE BUILDING BLOCKS OF SUCCESSFUL REFORM

A five-year study by the Center on Organization and Restructuring of Schools (CORS) at the University of Wisconsin concluded the most important factor in successful reform is the presence of a strong professional community in which teachers pursue a clear, shared purpose for student learning; engage in collaborative work; and take collective responsibility for student learning.

The CORS study also concluded that, while no individual structural reform guarantees improved student achievement, elements of restructuring contribute to success. Based on data from more than 1,500 schools nationwide and field studies of 44 schools in 16 states, CORS reported student achievement is linked to:

- Shared governance that gives teachers a role in setting school policy and influencing practice
- Structures such as teaching teams that encourage collaboration among teachers
- Professional development that puts skills into a context consistent with the overall school mission and restructuring efforts
- Autonomy that allows schools to develop and implement a process of change tied to high standards
- Small school size, which contributes to a culture of trust and communication
- Parent and community involvement in and support for school programs and restructuring efforts.

The study found that restructuring schools need external support (legislatures, district administrators, unions, professional organizations, private foundations, parents, the judicial system) to succeed. These external bodies need to encourage public dialogue about the importance of high-quality student learning, including the role of standards, staff development, parent/community involvement and deregulation.[32]

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STANDARDS/ASSESSMENT/ ACCOUNTABILITY

Evidence about the positive impact of standards-led reforms on student achievement is beginning to emerge.

Most states have only recently adopted standards, and only a handful of districts have aligned curriculum and implemented assessments that measure student performance against the standards. Preliminary results in cutting-edge districts, however, indicate that clear and rigorous standards — supported by assessments, instructional materials and teacher preparation — lead to improved performance. Significantly, the results also support that standards do not damage the academic chances of the least advantaged students. Rather, all students appear to benefit from higher expectations. Here are a few examples:

- In 1993, **Colorado** enacted legislation mandating the local adoption of standards. A number of districts already had begun to implement their own versions of standards and to link assessment, curriculum and instruction to these new, higher standards. In these pioneering districts, student achievement has risen, with the gains increasing over time as district standards are more thoroughly implemented. A comprehensive assessment aligned to state model standards will begin in 1997 and will provide statewide data on the impact of standards.[33]

- In **Kentucky**, the performance of each school in the state is assessed on 57 student competencies. Preliminary results show that between 1992 and 1994, 78% of the state's schools showed gains in student achievement. Scores among 4th, 8th and 12th graders rose by an average of 23%.[34]

- **Maryland** expects 70% of its students will perform at the satisfactory level on the Maryland School Performance Assessment Program by the year 2000. The percentage of schools reaching that goal increased from 31.7% in 1993 to 39% in 1995. Progress is shown by other measures. In 1993, 158 schools (more than 20% of all schools tested) were, by state estimates, far from meeting the standards in 3rd-grade mathematics. By 1995, only 7.7% of all schools were in that category. In 1995, nearly 300 schools approached or met the 3rd-grade math standards, up significantly from 113 schools in 1993.[35]

REFORM IN KENTUCKY: SETTING A NEW STANDARD FOR ACCOUNTABILITY

The Kentucky Education Reform Act (KERA) not only is the boldest effort to reform an entire system, but it is also the most heavily scrutinized and researched. What happens in Kentucky over the long term will greatly expand knowledge about systemic reform.

The Kentucky Institute for Education Research, created in 1992 by the governor, is the independent, nonprofit institute charged with evaluating KERA's impact on students and schools and making recommendations for ongoing improvement. The institute draws upon the research expertise of the University of Kentucky, University of Louisville, Kentucky Department of Education, Cabinet of Human Resources, Office of Education Accountability, Prichard Committee for Academic Excellence, Appalachian Educational Laboratory and a host of nationally known researchers.

Among the key findings to date:

- **Student achievement in reading, writing, mathematics, science and social studies, as measured by the Kentucky Instructional Results Information System, increased by 19% between 1992 and 1994.**

- **About 95% of schools raised the level of student performance, 38% of them improving enough to earn rewards.**

- **The percentage of students performing at the two highest levels of achievement (proficient and distinguished) nearly doubled, while the proportion performing at the lowest level (novice) declined from almost half to just over one-third.**

The most important finding so far might be this: A state is encouraging independent researchers to study the consequences of its reform initiatives in a comprehensive way and to report to the public what they find — both good and bad. This practice sets a new standard for accountability.[36]

- In **New York**, the City University of New York's (CUNY) College Preparatory Initiative imposes academic requirements on high school students considering attending a CUNY college. In the four years since the program began, the number of freshmen from New York City public schools who have taken a year or more of college-preparatory math increased by 29%. The figures for similar science courses were up 19%, and the number of students who took four years of English rose 52%. As a result of the higher standards, only 26% of this fall's CUNY freshman class are taking remedial classes, down from 36% last year. This fall's freshman class is characterized by CUNY's administration as the best academically prepared group to enter the institution in the past 20 years.[37]

- **Minnesota** has begun to evaluate the likely cost of implementing its standards statewide. Outside analysts estimate the costs at $28.4 million in 1996-97 and $36.1 million in 1997-98. Taking into account reallocations from professional development activities and sources such as federal Goals 2000 funds, the estimated net cost per pupil is $12.18 in 1996-97 and $17.83 per pupil in 1997-98 ($10.2 million statewide in 1996-97 and $15.2 million in 1997-98).[38]

FLEXIBILITY

Flexibility strategies achieve their greatest potential to enhance student achievement when they are integrated with other reforms to strengthen the teaching and learning process, such as standards-based reform.

- **Deregulation**

  Deregulation alone does not spur significant change in local school practices. Schools also need to build additional capacity and develop policies to make use of the new flexibility. The Consortium for Policy Research in Education (CPRE) reached the following conclusions about deregulation as a reform policy:[39]

  - Deregulation should be viewed as one component of multiple supports and elements that states and districts can provide.
  - Deregulation should be tied into accountability and incentive structures that promote continuous improvement in performance.
  - Development of credible and legitimate assessment measures is a high priority.
  - Not all regulations can be eliminated. Rather than eliminating regulations, policymakers might think about rationing regulations. Concerns about equity and politics will continue to lead to new regulation.
  - Policymakers need to rely less on mandates and more on building capacity.
  - Approaches must be developed to correct the persistent difficulties of schools that are consistently failing.

- **Choice**

  Research on choice is uneven and suggests that choice may not be an effective stand-alone reform strategy. No one teaching and learning model is best for every student. Different kinds of schools logically lead policymakers toward giving families the right to choose from among various schools. There are many kinds of choice and no clear answers from research on its impact on student learning.

  One synthesis of research concluded that choice schools have higher levels of parent satisfaction, but a study of Milwaukee's choice program concluded that choice did not correlate positively with increases in student learning.[40] A more recent study of the Milwaukee choice program found positive results for students who participated in the choice program for three and four years.[41] Questions in both studies remain over the appropriateness of their control groups and the numbers of students involved in the program over the four-year period.

  A U.S. Department of Education review of public school choice in Minnesota showed small but generally positive trends and effects of public school choice.[42] Perhaps the study's most important contribution was its findings about what is not happening. When choice was first implemented, there were many dire predictions, including low participation of minority students, students changing schools for frivolous reasons and financial problems for districts because of higher student mobility. The Minnesota study showed that in the

1991-92 school year, 4% of Minnesota students chose the school they attended, up substantially from the number in 1990-91. Academics played an important role in the family decision to take advantage of open enrollment. Statewide, minority students use school choice at the same rate as white students. The study's findings were mixed concerning the assumption that school choice encourages program improvement.

Choice is meaningful only when families have high-quality and distinctive alternatives from which to choose. The creation of such schools hinges on other reforms that more directly address the teaching and learning process.

- **Site-Based Management**

  Evaluations of site-based management (SBM) consistently suggest the approach appears to have little independent effect on student performance. Major reviews of SBM efforts released in the past several years conclude that most such programs contain vague goals and lack connection to student performance. School leaders tend to see site-based management as an end in itself, rather than as a tool to boost student achievement. Efforts to evaluate SBM's effectiveness have been sparse, and the majority have not focused on its impact on student performance. RAND researchers concluded it is too soon to know whether significant governance changes improve schools educationally, but not too soon to see that decentralization efforts can fail to produce meaningful governance changes.[43]

- **Charter Schools**

  Charter schools are too diverse and their track record too new to support broad conclusions about their impact on student performance. The body of research around the implementation of charter schools is growing, however. An ECS-sponsored study (*Charter Schools: Initial Findings*) found:

  - **The strength of a given charter school law significantly influences the number of charter schools that are established.** Stronger laws allow any individual or group to apply for a charter, provide an appeals process or allow some entity other than the local school board to approve charters, and give charter schools increased legal and fiscal autonomy. As of December 1995, in the six initial states with stronger laws, 222 charter schools are known to be operating,

WHAT MAKES SITE-BASED MANAGEMENT WORK

The 1994 CPRE[44] research study concluded that site-based management works better when schools:

- Have power over budget and personnel
- Give teachers decisionmaking power through a series of teams organized both vertically and horizontally
- Invest in continuing professional development to strengthen both individual and organizational capacity, especially on curriculum, instruction, team work and budgeting
- Get access to a wide range of information on revenues, expenditures, teachers, student performance, parent and community satisfaction research results
- Facilitate teacher decisionmaking through principals who broker resources on curriculum, instruction, professional development and other key topics and provide rewards for improving expertise and producing results.

compared with 14 schools in the five initial states with weaker laws.

- **Existing charter schools are very small on average.** With the exception of California, where a larger percentage of charter schools are converted public schools, nearly every charter school serves fewer than 500 pupils. Considering that many charter schools serve students at the middle and/or high school levels, these schools are significantly smaller than traditional public schools.

- **Charter schools serve minority students.** A greater-than-expected number of charter schools are being established within inner-city environments, often by minority leaders in those communities.

- **It is too early to tell whether income levels affect where charter schools will be established and who will attend.** Because many charter schools do not participate in the federal free and reduced-price food program, socioeconomic data on such students are not readily available. Moreover, nearly one-half of the operating charter schools opened their doors only in the last year.

- **Charter schools are attracting private-school and home-schooled students back into the public school system in several states.** Approximately 9% of Arizona's current charter school students had been home-schooled, and 19% had been in private schools. Initial data in Massachusetts show that about 14% of current charter school students came from private schools, and about 1% had been home-schooled.

THE RISE OF CHARTER SCHOOLS

The Hudson Institute is conducting an in-depth, two-year study of charter schools, focusing on start-up problems, solutions to those problems and the policy environments in which such schools are most apt to thrive or falter.[45] The initial findings of the study's first year include:

- Students attending charter schools are diverse; 63% of the nearly 8,400 students in the sample are minorities.
- Eighty-one percent of students in the sample had been enrolled in public schools prior to attending the charter school, while 8% came from private schools, 2% were home-schooled and 4% had dropped out of school.
- Charter-school students, many of whom had been unsuccessful in other schools, were generally satisfied with the education they are receiving, citing clear academic expectations, safety, individualized instruction, committed teachers and family-like atmosphere.
- Charter schools are attracting talented, often unconventional teachers, who fulfill many other functions within the schools.
- Parent and student satisfaction is manifest in a number of ways, including the fact that nearly all charter schools have waiting lists. Other reasons for parent satisfaction are related to high student expectations, coherent curriculum, minimal bureaucracy and family-like atmosphere.

TECHNOLOGY

Research on the impact of technology on student achievement is largely anecdotal. More focused research is needed, but the anecdotal evidence appears promising.

One recent report, *Effectiveness of Technology in Schools*,[46] reviewed more than 130 studies conducted between 1990 and 1994 and concluded that using technology to support instruction leads to improved student achievement in language arts, math, social studies and science. Among the results highlighted in this report:

- A review of computer-based instruction in military training found that **students reached similar levels of achievement in 30% less time** than students not using computers.
- A review of New York City's Computer Pilot Program, which focused on remedial and low-achieving students, **showed gains of 80% in reading and 90% in math** when computers were used in the learning process.
- A 1993 survey of studies of technology's effectiveness found that courses for which computer-based networks were used **increased interaction among students and between students and teachers**, including lower-performing students. Technology did not decrease traditional forms of communication.

SCHOOL SAFETY AND DISCIPLINE

Research suggests that efforts to make schools safer and more orderly are a necessary, but not sufficient, condition for increasing student achievement.

Efforts to improve school safety and discipline often promote transitional improvements by making the school environment more conducive to learning. But real gains in student achievement also seem to require fundamental changes in the teaching and learning process.

REFORM NETWORKS

Reform networks are an important new element of reform, providing stronger links between like-minded educators and schools.

Reform networks link schools to educators with expertise in particular reform strategies and to other schools implementing similar reforms. The preliminary success of these networks has made parents and policymakers more receptive to change and less patient with efforts to maintain the status quo. Networks are working to implement many structural reforms that strengthen teaching and are linked to increased student achievement.

Membership in national reform networks is growing steadily. In 1996, nearly 3,000 schools were affiliated with five of the larger networks. Efforts to evaluate and disseminate information have grown in recent years as well. For more information on the effects of restructuring networks, see appendix.

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THE NEED FOR STRONGER STATE EVALUATION EFFORTS

Most state evaluation efforts focus on the effectiveness of specific programs, rather than on the overall impact of reform policies on student achievement and school quality. More coherent, comprehensive strategies to evaluate the effectiveness of reform are increasingly crucial to the success of states' efforts to improve school and student performance.

- **Evaluation Focus**

  Just as important as what is known is what is not yet known about the effectiveness of various reforms. Much of the available research focuses on structural changes that occur in schools as a result of reform and not on changes in learning or student achievement. In *Taking Stock of Reform*,[47] for example, the author identified 149 research studies that included the Coalition of Essential Schools or like-minded efforts. More than two-thirds of the studies investigated the process of implementation rather than the reform's impact on learning. Now, however, questions about the impact of reform on teaching and learning are being addressed more frequently. The research collection contains only one such study conducted before 1993. Since then, 24 studies have addressed the effects of reform on student learning.

- **Evaluation Challenges**

  It is difficult to measure the impact of various reforms on student learning. One problem is the challenge of distinguishing cause and effect among the variables involved in complex reform. Schools often change on a number of fronts simultaneously, adopting new governance structures, implementing standards and changing their relationship to the community.

  A second challenge is the choice of achievement measures. There is widespread agreement that conventional standardized tests fail to measure many valued student outcomes, but it has been difficult and expensive to develop credible alternatives to capture those results. Standards-driven reform is helping to meet this challenge head-on by supporting the development of assessments aligned with standards.

  Finally, while researchers generally agree that a reform must be in place for some time before it is fair to expect gains in student learning, few researchers have undertaken longitudinal studies that follow a cohort of students over time. Longitudinal studies are more difficult to design and more costly and can be undermined by such variables as high rates of student mobility.

  States confront all of these issues — as well as significant limitations in evaluation resources and capacity — in attempting to evaluate the impact of their policies on student achievement. As a result, only a few states attempt anything close to a comprehensive state evaluation of their policies, Kentucky being the most notable. Instead, states tend to evaluate individual programs in isolation. And the results being measured often do not include, or even relate to, student learning or achievement.

RECOMMENDATIONS

Although numerous education reforms are under way with state-level support, policymakers continue to face hard choices about how best to support and improve public education. The following recommendations are designed to help state policymakers select, support and manage education reforms that will bridge the gap between current student performance and levels of achievement needed to succeed in the future.

1. **Invest in and strengthen evaluation efforts and encourage wider dissemination of results.**

   Quality evaluation efforts are central to the goals of continuous improvement, public support for reform, accountability for results and good public policy. Potential users of reform strategies need better information about effects, costs, conditions of success and unanticipated effects. Good data are the best defense against ever-changing reform trends. As the political debate turns more rancorous and turnover in leadership continues, evaluation is essential to help reform efforts stay the course.

2. **Continue to focus attention on the need to improve teaching and learning.**

   Structural changes alone do not guarantee improved student achievement or changes in instructional practice. Longer school days, for instance, do not automatically ensure that teachers will use the time to teach in fundamentally different ways. Greater teacher empowerment does not necessarily lead to better teaching or to improved student achievement. Standards-based reform and reform networks can help focus policy on improving instruction and increasing student achievement, and provide educators with the resources and knowledge necessary to improve practice.

3. **Integrate reform strategies.**

   Many reform initiatives described in this report — including decentralization, choice and charter schools — could be strengthened by being integrated with reform networks or high academic standards and related accountability systems. Similarly, reform networks need to take advantage of flexibility strategies as they encounter unsupportive education systems and rigid structures. The risks of isolation — and the rewards of collaboration — are enormous.

4. **Continue to build public understanding of the issues.**

   Make a special effort to communicate well with teachers. Make involving parents and the community a top priority. Show how new ideas enhance, rather than replace, the old ones. Be clear about what it means to set high standards for all students and what it will take to meet them.

5. **Give greater priority to strengthening school districts that serve the highest concentration of low-income and at-risk students.**

   Until schools, working with their communities, can better serve the needs of low-income, at-risk students, performance levels in the public school system as a whole will not improve significantly. This reality is becoming ever more apparent in light of demographic trends. The development of effective instruction for disadvantaged students may well cost significantly more per student per year.

Appendix: RESTRUCTURING NETWORKS — ACTIVITIES AND EVALUATION

This appendix includes brief descriptions of the major reform networks and relevant evaluation data. The networks' impact on student achievement overall has been small, simply because these networks work with only a fraction of the schools and student population. The impact of networks in their affiliated schools, however, is often dramatic.

- **Coalition of Essential Schools (1,042 affiliated schools)**

Based on the work of Ted Sizer of Brown University, the Coalition of Essential Schools (CES) redesigns American high schools for better student learning. The coalition's work is guided by Nine Common Principles that schools adapt to their own settings. These principles focus on helping adolescents learn to use their minds well.

A recent analysis of 149 research studies that include CES schools (or like-minded efforts) offers encouraging evidence that when coalition principles are infused into a school, the school will provide high-quality teaching to students. The research analysis finds that a communal structure and high intellectual standards — key features of CES schools — are related to significantly higher student achievement gains.[48]

- **Accelerated Schools (700 affiliated schools)**

Created by Stanford University's Henry Levin, the Accelerated Schools project was launched in 1986 to bring at-risk students into the academic mainstream by providing an education typically restricted to gifted and talented students.

Accelerated schools show improvement in student achievement and attendance, full inclusion of special-needs children and parent participation, as well as higher numbers of children meeting traditional criteria for gifted and talented students. Evaluations also have demonstrated reductions in student suspensions and vandalism, and fewer students repeating grades.[49]

- **School Development Project (500 affiliated schools)**

Based on the work of James Comer of Yale University, the School Development Project (SDP) is designed to bridge the gap between the attitudes, values and behaviors children develop at home and those they are taught at school. The project addresses learning/behavior problems as conflicts of class, race, income and culture between children's home and school environments, not as children's deficiencies.

An analysis of the last 10 years of achievement data from schools implementing the SDP model indicated that SDP has a positive effect on student performance. Students in SDP schools benefited from higher attendance and teacher ratings of classroom behavior, student attitudes toward authority and group participation. There were positive changes in school climate and parent satisfaction as well.[50]

- **Public Montessori Schools (166 affiliated schools)**

Montessori schools have a comprehensive philosophical structure that gives coherence to a school's program and promotes independent learning and thinking skills. A Montessori assessment tool has not yet been developed, but by traditional measures students in these schools tend to score above average from their public-school peers.[51] Some Montessori magnet schools are being closed due to the reversal of desegregation policies and as districts revert to neighborhood schools. Yet the emergence of new, alternative structures for schooling, such as district clusters, charter schools and open enrollment, offers opportunities for future expansion.

- **New American Schools (500 affiliated schools)**

The New American Schools initiative is a national partnership among New American Schools (NAS) (formerly known as the New American Schools Development Corporation), the Education Commission of the States and seven innovative school designs developed by independent groups through financial support from NAS.

NAS retained the RAND Corporation to develop and undertake a five-year, comprehensive, independent evaluation of how these designs improve student achievement. Until these evaluation results are available, the schools are reporting their preliminary progress on the basis of relevant state or district-level measures.

The following table summarizes information provided by NAS.[52]

DESIGN	EARLY INDICATORS OF PROGRESS
ATLAS Communities is a coalition of education reform projects initiated by Ted Sizer of Brown University, James Comer of Yale University, Howard Gardner of Harvard University and Janet Whitla of the Education Development Center. The design revolves around pathways — feeder patterns of schools from kindergarten to grade 12. Teams of teachers from across each pathway work together to design curriculum and assessment strategies based on locally defined standards and, in collaboration with parents and administrators, to implement sound policies and management structures that support improved teaching and learning. The design is in place in five pathways in both urban and rural areas across the country.	Reading scores in the Prince George's County, Maryland, pathway elementary school have increased by up to 30% since 1992, while the middle school reported increases in math, language usage, science and social studies over the same period. The proportion of students scoring satisfactory or excellent on the Maryland School Performance Assessment Program increased from 9% to 29% in these areas from 1992 to 1995. In the Norfolk, Virginia, pathway, 7th-grade composite scores on the Iowa Test of Basic Skills increased by 21% between 1992 and 1996, while 11th-grade scores on the state-mandated Aptitude and Proficiency Test increased 7%.
The Audrey Cohen College System of Education provides an organizing structure through which students master content and skills in core academic areas. Students achieve each semester's "purpose" by planning, carrying out and evaluating a "constructive action" in which they use their knowledge and skills to benefit their community and the larger world. Twenty-one Audrey Cohen College Schools are located in five states (17 elementary schools, one middle school, one junior-senior high school and two senior high schools).	Student performance on standardized achievement and local criterion-referenced tests has met or exceeded school and district expectations. For example, students in a Phoenix, Arizona, elementary school averaged a 35% increase from pre-test to post-test on the districtwide criterion-referenced assessment instrument in reading, math, writing, social studies and science across most grades.
Co-NECT Schools are organized around small clusters of students taught by a cross-disciplinary teaching team. Teaching and learning revolve around authentic interdisciplinary projects that give students an opportunity to acquire critical skills and academic understanding as defined by the school's performance standards. A school design team, including teachers, administrators and parents, sets goals and monitors results. Sixteen schools in eight states are implementing the design (two high schools, five middle schools, eight elementary schools and a K-9 school.)	Scores in the "All School" category on the NAEP reading items rose from 32% correct in fall 1993 to 45% correct in spring 1994 and 47% correct in spring 1995. The four Co-NECT middle schools in Dade County, Florida, which began implementation in 1995, showed significant gains (ranging from 8 to 17 points) on the statewide writing assessment in their first year.
Expeditionary Learning Outward Bound offers a curriculum centered on learning expeditions developed by each school's teachers, with the support of the Expeditionary Learning staff and teachers in other Expeditionary Learning schools. Consistent with state and district standards, learning expeditions explore topics in-depth both inside and outside of the classroom. Usually interdisciplinary, they involve challenge, teamwork and learning by doing. They aim to develop not only intellectual ability, but also physical fitness, craftsmanship and character. The design requires deep and focused instruction, flexible block scheduling, heterogeneous grouping and multi-year student-teacher assignment. There are 10 pilot schools in five states. Fourteen schools in three other states have begun implementation within the last year.	In Boston, three-year longitudinal comparisons of scores on the Metropolitan Achievement Test show that mean scores in reading and mathematics in grades 5 and 6 improved significantly. In King Middle School in Portland, Maine, 8th-grade scores on the Maine Tests of Educational Achievement rose significantly in 1995 in all seven curriculum areas tested. Scores went from below state average in all seven areas to above state average in six areas. In New York City, three-year longitudinal comparisons show significant increases in grades 7 and 8 on the Degrees of Reading Power test.

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DESIGN	EARLY INDICATORS OF PROGRESS
The **Modern Red Schoolhouse** design encourages teachers to use methods tailored to identify and nurture the potential that exists in every child. Like its 19th-century namesake, the Modern Red Schoolhouse is based on the belief that mastery of subject matter and basic skills is the only acceptable goal for all children. Unlike the original little red schoolhouse, however, the design incorporates advanced technology as a critical tool to restructure and strengthen both instruction and management in schools. The design team has developed a set of high standards and assists schools in creating individualized plans to help all students achieve them, at whatever pace they can. Fifteen schools in four states (10 elementary schools, two middle schools, one junior high school, two high schools) are implementing the Modern Red Schoolhouse design. Another 20 schools have voted to join the initiative and are in negotiations with district and state offices.	The most striking changes in student achievement occurred at Hansberry Elementary School in the Bronx, New York, an urban school where nearly all students qualify for free or reduced-price lunches. From 1993 to 1995, the percentage of students who passed New York State's essential-skills test rose from 22% to 50% in reading and from 47% to 82% in mathematics.
The **National Alliance for Restructuring Education,** a partnership of states, school districts and leading national organizations, has as the hallmark of its effort the Certificate of Initial Mastery, a high standard of accomplishment. To help all students attain a certificate by the time they leave high school, the alliance is developing high standards of student performance in core academic subjects; building better ways to measure that performance; redesigning curriculum and instruction so they are linked to standards; integrating technology into instruction; redesigning the transition from school to work; organizing health and social services to improve support for children and families; restructuring the organization and management of schools; and engaging parents and the public in reform efforts. Contribution to student achievement is the only criterion for any activity in the system. Originally, the alliance worked with 12 schools in three jurisdictions. In 1993-94, it added an additional 44 schools. In 1995-96, the alliance operated in more than 100 schools in eight jurisdictions.	The best available data on student performance comes from schools in Kentucky, where the state assessment system is tied to high standards and the state annually reports results from individual schools. Of the 15 alliance schools, 13, or 87%, earned cash awards in 1995, the first year of the program, compared with 38% of the schools statewide.

DESIGN	EARLY INDICATORS OF PROGRESS
Success for All/Roots and Wings is a comprehensive restructuring program for elementary schools. The program provides innovative curricula, instructional methods and professional development in reading, writing/language arts, mathematics, social studies and science. The curricula emphasize cooperative learning, simulations, experiments and frequent assessments. Other design elements include reading tutors for primary-grade children who are struggling and a family support team to address nonacademic problems. The "roots" in Roots and Wings is derived from the widely used Success for All program. The "wings" component focuses on a constructivist math program and an integrated social studies/science program. Roots and Wings was piloted in four schools in rural Maryland. Now more than 300 schools nationwide are implementing Success for All, with 37 of these schools adding the math, science and social studies curricula that constitute the new Roots and Wings program.	Success for All students showed significantly positive effects (compared to a control group) on every reading measure for grades 1-5. By grade 5, Success for All students were performing 75% of a grade equivalent ahead of students in the control group.[53] Data from the Roots and Wings pilot schools show gains over three years on Maryland School Performance Assessment Program (MSPAP) scores for 3rd- and 5th-grade students and substantial gains over that time period in the percentage of students scoring at or above the satisfactory level on all six MSPAP scales. Averaging across the six scales, the percentage of Maryland 3rd graders scoring satisfactory or better increased by 8.6%, in comparison to a gain of 18.9% for 3rd graders in Roots and Wings schools from 1993 to 1995. For 5th graders, students across the state gained an average of 6.4%, while those in Roots and Wings schools gained 13%.[54] In Flint, Michigan, the percentage of 4th-grade students passing the Michigan Educational Assessment Program in reading has increased dramatically. In 1995, 48.6% of one school's student population passed, ranking it first in the district.[55]

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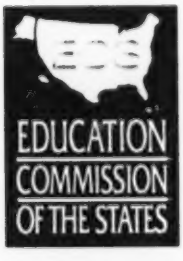

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